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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|-------------------------|
| 10/644,992 | 08/21/2003 | Michael Dalpiaz | 66489-28-5 | 7100 |
| 7590 | 01/10/2005 | | | EXAMINER HO, ALLEN C |
| Dykema Gossett PLLC Suite 300 West 1300 I Street, N.W. Washington, DC 20005-3306 | | | ART UNIT 2882 | PAPER NUMBER |

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/644,992 | DALPIAZ ET AL. |
| Examiner | Art Unit | |
| Allen C. Ho | 2882 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 August 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 092003.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Drawings

1. Fig. 1 is objected to because it is not in English. MPEP § 608.02. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1 and 16 are objected to because of the following informalities: Claims 1 and 16 recite the limitation "the x-ray apparatus". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

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3. Claims 2-15 and 17-27 are objected to because of the following informalities: Claims 2-15 and 17-27 fail to set forth their dependencies. Appropriate correction is required. Note: the preliminary amendment filed on 21 August 2003 was not entered because it was deemed non-compliant.

4. Claims 5-15 and 19-27 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

5. Claims 16-27 are objected to because of the following informalities: Claim 16 fails to clearly set forth method steps. Appropriate correction is required.

6. Claim 16 is objected to because of the following informalities: Claim 16 recites the limitation "those areas" and "selected area". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "the selected area is covered when a dental x-ray image is made". It is unclear if this dental x-ray image is one of the digitized dental x-ray images stored in the storage area.

Claim 16 recites "the selected area can be depicted in a dental x-ray image". It is unclear if this dental x-ray image is one of the digitized dental x-ray images loaded and displayed in the first step.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Milnes (U. S. Patent No. 6,463,121 B1).

With regard to claims 1-4 and 16-18, Milnes disclosed a system for positioning dental x-ray apparatus, comprising: an input and output device (122) for interactive control (column 3, lines 47-64); a storage area (710, 725), in which at least one digitized dental x-ray image (when x-ray image comprises teeth) and information concerning the x-ray apparatus assignable to the digitized x-ray image are stored; a computer interface (710), via which information can be interchanged with the x-ray apparatus; means (122) for selecting area in the digitized dental x-ray image; a processing unit (710) which effects calculations based on the digitized dental x-ray image, the relevant information concerning the x-ray apparatus, and the selected area, in order to ascertain control data for the dental x-ray apparatus (column 5, lines 43-55), wherein the dental

x-ray apparatus is controllable by the control data such that the selected area is covered when a dental x-ray image is made.

11. Claims 16-18 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Milnes (U. S. Patent No. 6,463,121 B1).

With regard to claims 16-18, Milnes disclosed a method of positioning the emitter and/or detector of dental x-ray apparatus, comprising the steps of: loading and displaying at least one digitized dental x-ray image (when x-ray image comprises teeth); determining coordinates of selected areas with reference to the digitized dental x-ray image (column 5, lines 43-55); loading information concerning the x-ray apparatus; carrying out computation on the basis of relevant information concerning the x-ray apparatus and the selected area in the digitized dental x-ray image in order to ascertain control data which controls the dental x-ray apparatus such that the selected area can be depicted in a dental x-ray image to be acquired.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- (1) Zimmermann (U. S. Patent No. 6,793,391 B2) disclosed a system and method for sensor positioning.
- (2) Yoshimura (U. S. Patent No. 6,619,839) disclosed a positioning system of a dental x-ray apparatus.
- (3) Milnes (U. S. Patent No. 6,463,121 B1) disclosed an interactive x-ray position and exposure control system using image data as reference information.

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(4) Guenther *et al.* (U. S. Patent No. 4,856,038) disclosed a dental x-ray diagnostic installation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Allen C. Ho
Patent Examiner
Art Unit 2882

06 January 2005